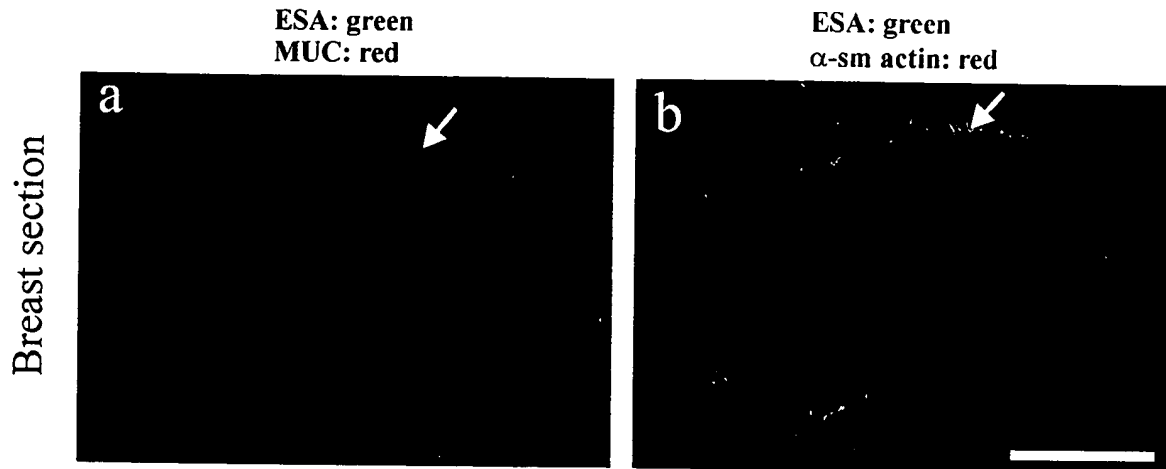


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Identification of "suprabasal" luminal epithelial cells in the breast.

A. Suprabasal cells belong to the luminal epithelial lineage.



B. A subset of cells within the luminal epithelial lineage is sialomucin-negative.

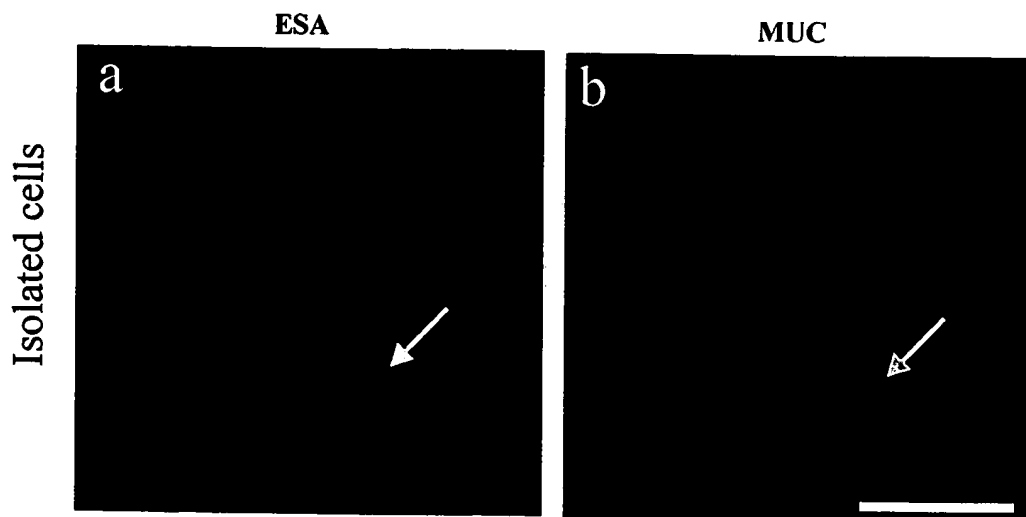


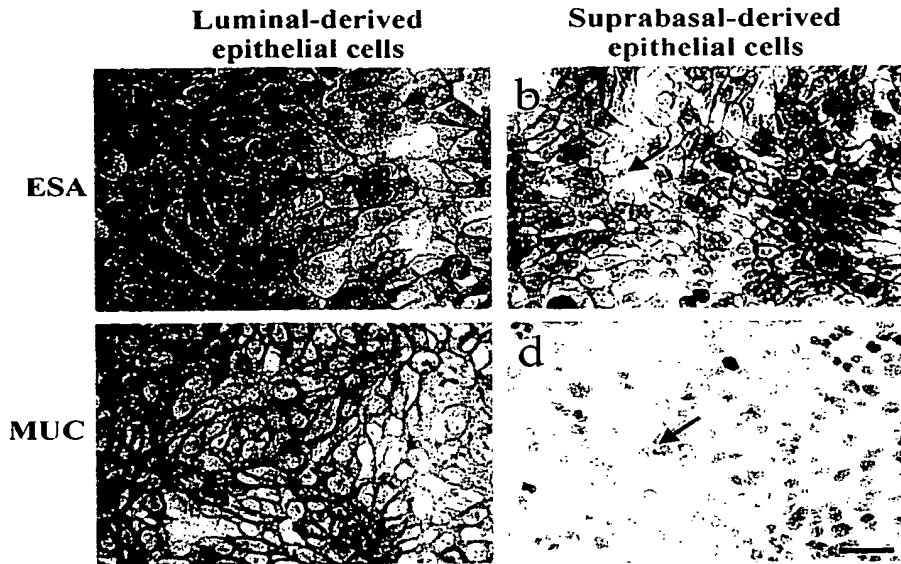
Fig. 1

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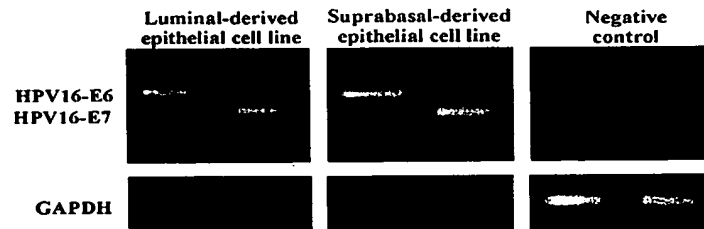
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Isolation, immortalization and characterization of luminal and suprabasal-derived epithelial cells.

A.



B.



C.

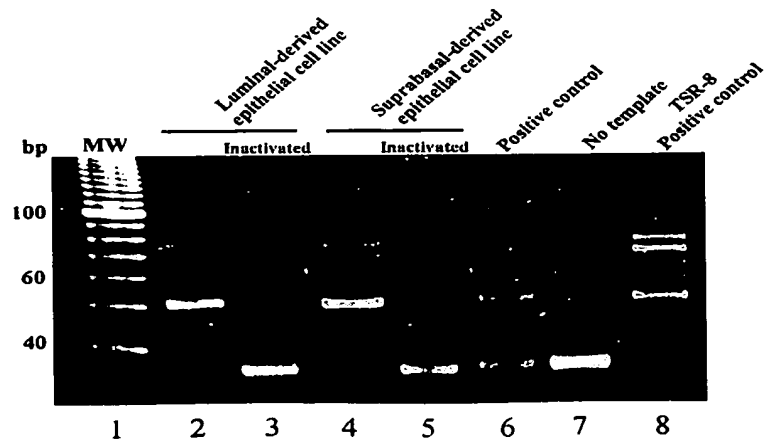


Fig. 2

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D. Both the luminal- and suprabasal-derived cell lines belong to the luminal epithelial lineage.

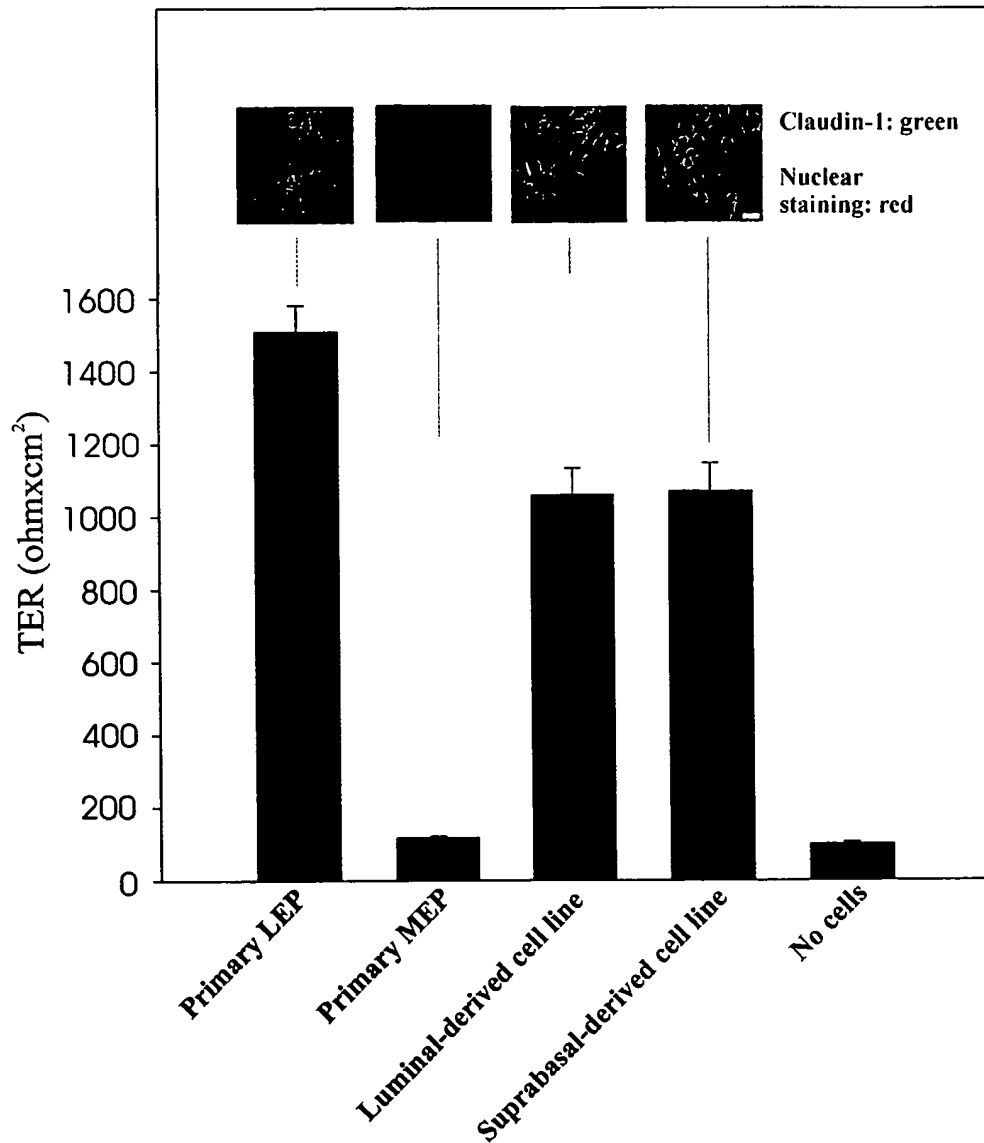


Fig. 2 (continued)

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Evidence for multipotency in the suprabasal-derived epithelial cell line

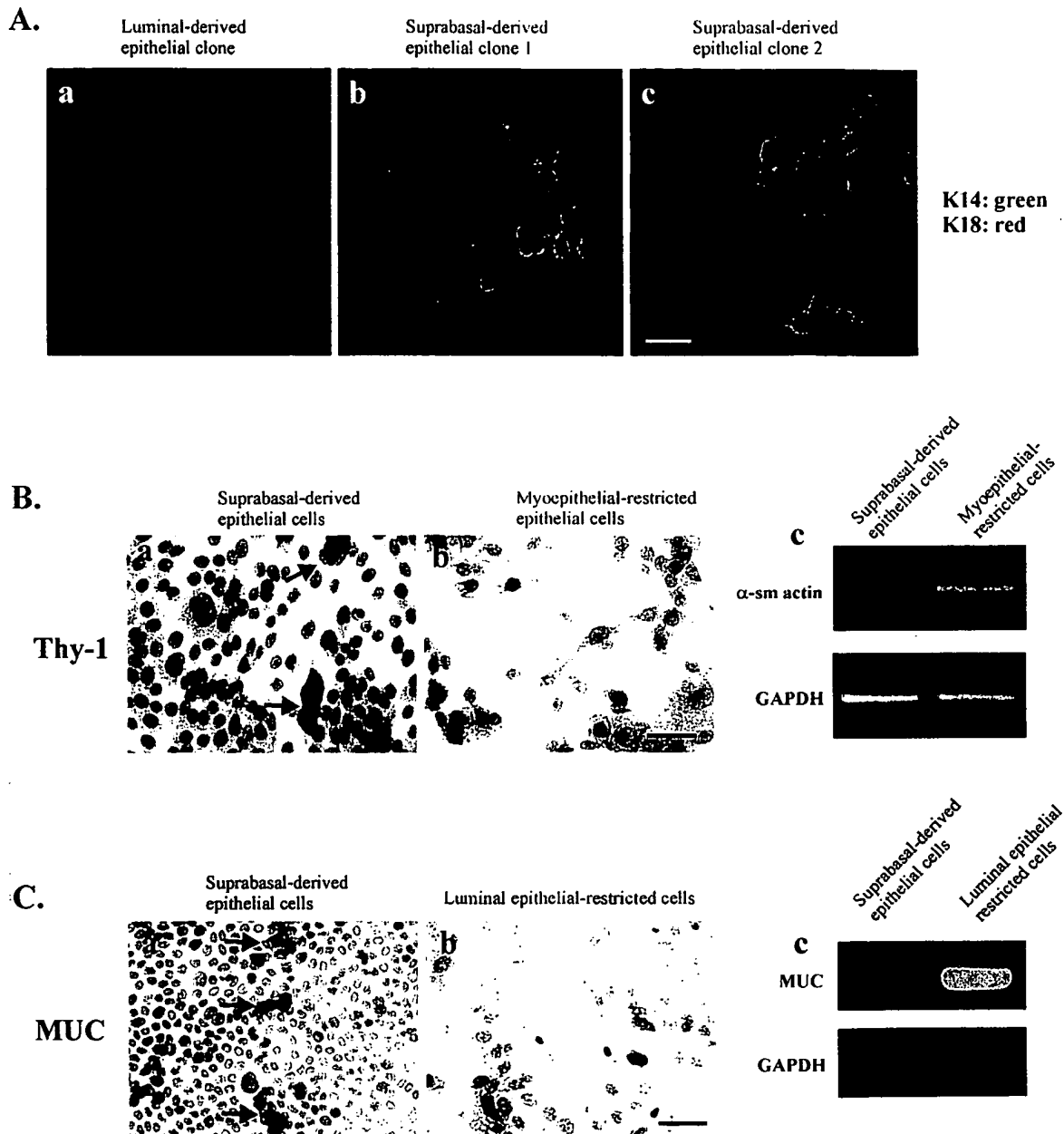


Fig. 3

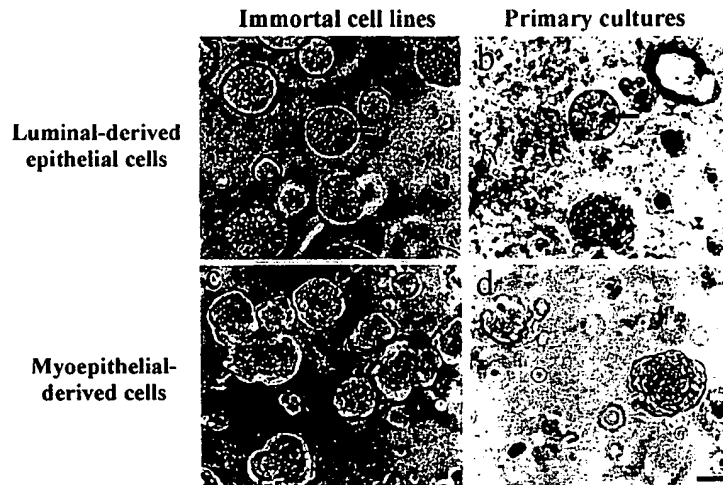
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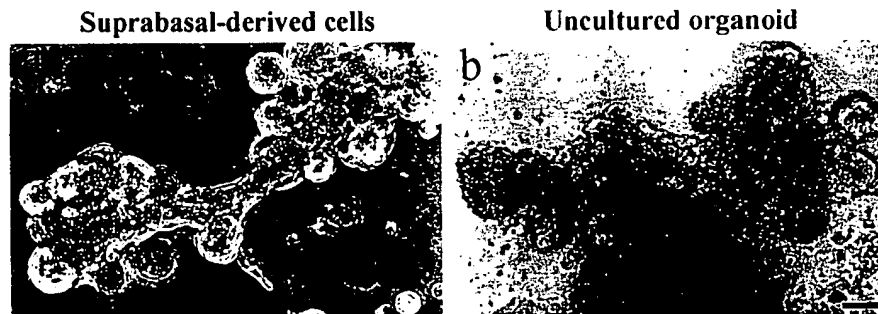
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Only suprabasal-derived epithelial cells give rise to terminal duct lobular units (TDLUs).

A



B



C

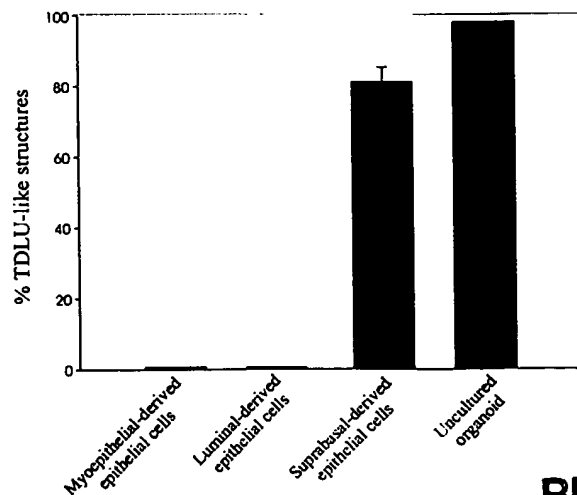


Fig. 4

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D. *Only suprabasal-derived epithelial colonies in a laminin-rich gel resemble TDLU in vivo.*

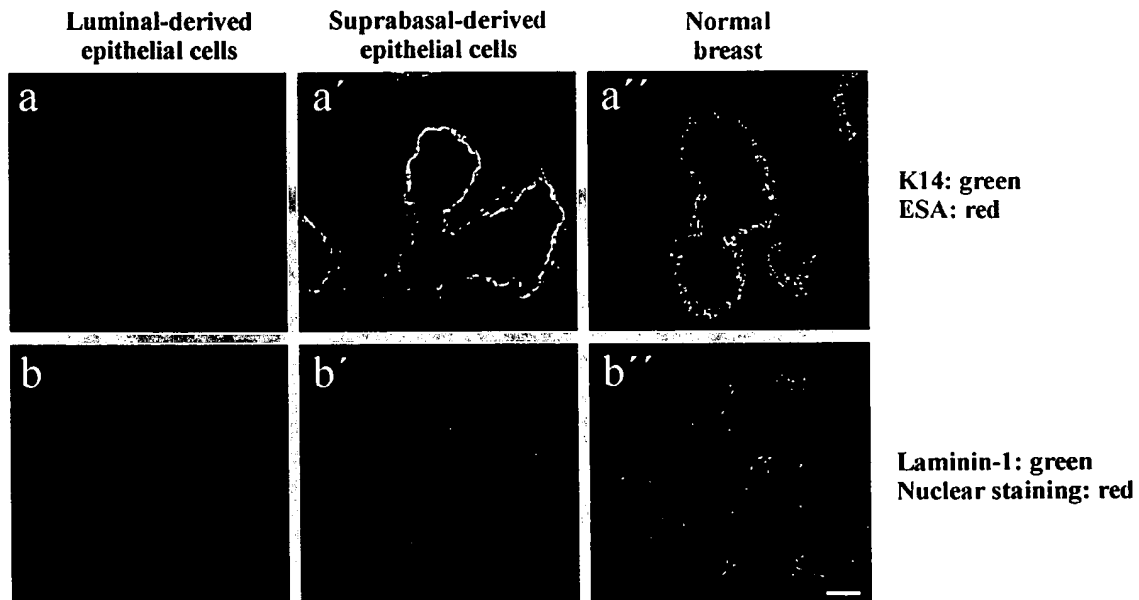


Fig.4 (continued)

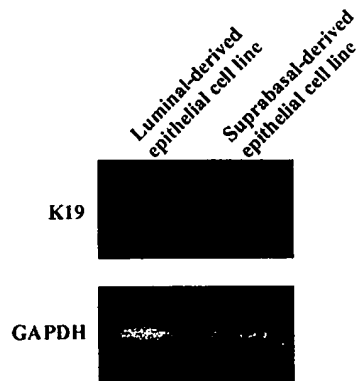
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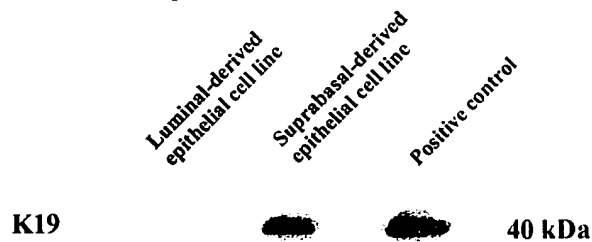
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The suprabasal-derived cells are keratin K19-positive similar to a subpopulation of cells in TDLU and neoplastic breast epithelial cells in vivo.

- A. Luminal- and suprabasal-derived epithelial cells differ by expression of mRNA for keratin K19.



- B. Luminal and suprabasal-derived epithelial cells differ by expression of protein for keratin K19.



- C. Keratin K19 staining in cultures of luminal- and suprabasal-derived epithelial cells.

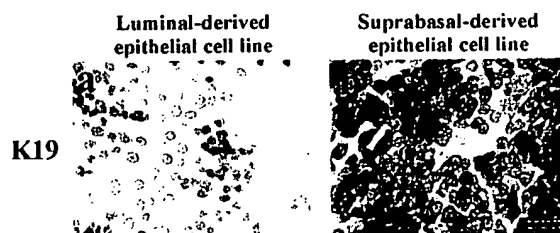


Fig. 5

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*Keratin K19 staining in sections of normal breast tissue (TDLU) and
infiltrating ductal carcinoma (IDC).*

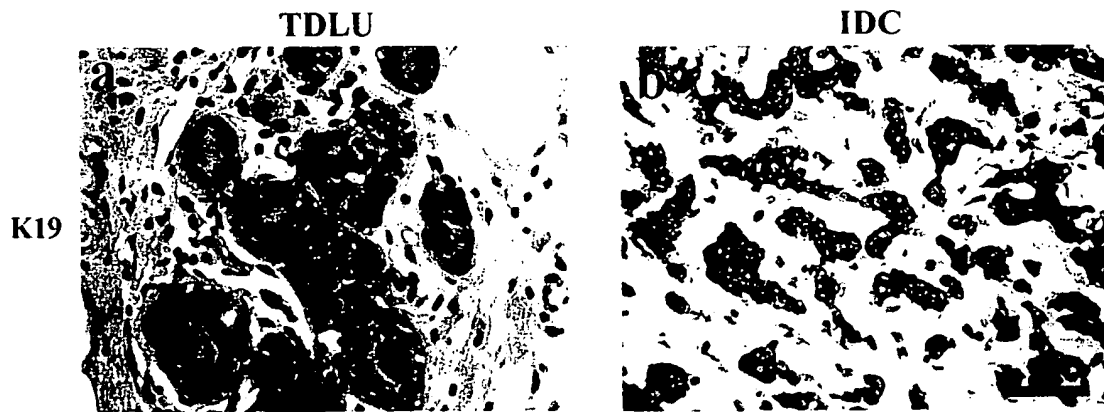


Fig.6

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Clonal segregation of keratin K19-positive and K14-positive cells in two- and three-dimensional culture, and mouse implants of suprabasal-derived epithelial cells.

Clone in monolayer



K14: green
K19: red

Clone in
laminin-rich gel



K14: green
K19: red

Nude mouse implant



K14: green
K19: red

Fig. 7 BEST AVAILABLE COPY